FIG. 1

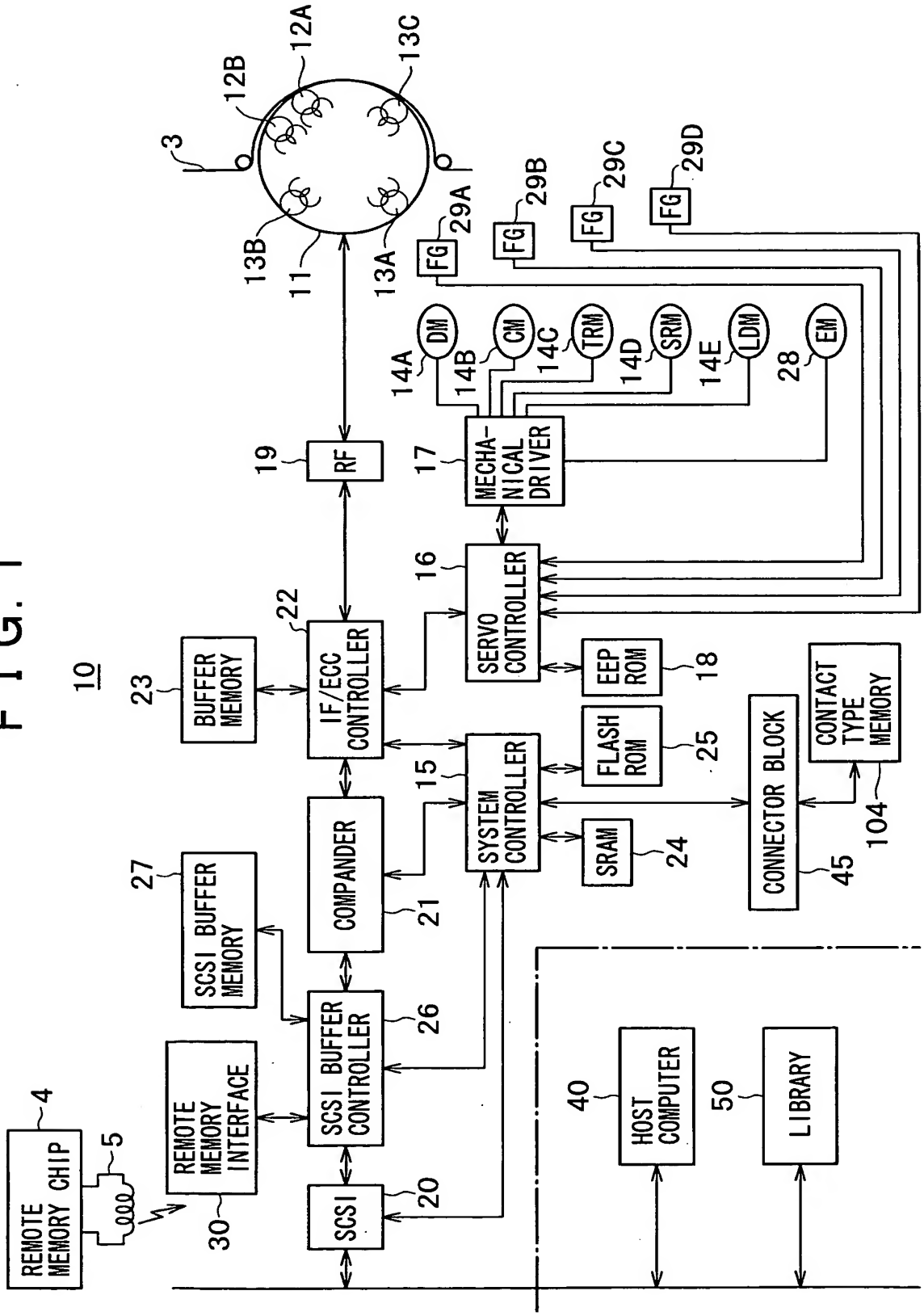

10
REMOTE MEMORY CHIP
4
5
REMOTE MEMORY INTERFACE
30
SCSI
20
SCSI BUFFER CONTROLLER
26
SCSI BUFFER MEMORY
27
COMPANDER
21
IF/ECC CONTROLLER
22
BUFFER MEMORY
23
RF
19
3
12A
12B
13B
11
13A
13C
FG
29A
FG
29B
FG
29C
FG
29D
DM
14A
CM
14B
TRM
14C
SRM
14D
LDM
14E
EM
28
MECHA-NICAL DRIVER
17
SERVO CONTROLLER
16
SYSTEM CONTROLLER
15
EEP ROM
18
FLASH ROM
25
SRAM
24
CONNECTOR BLOCK
45
CONTACT TYPE MEMORY
104
40
HOST COMPUTER
50
LIBRARY

FIG. 2

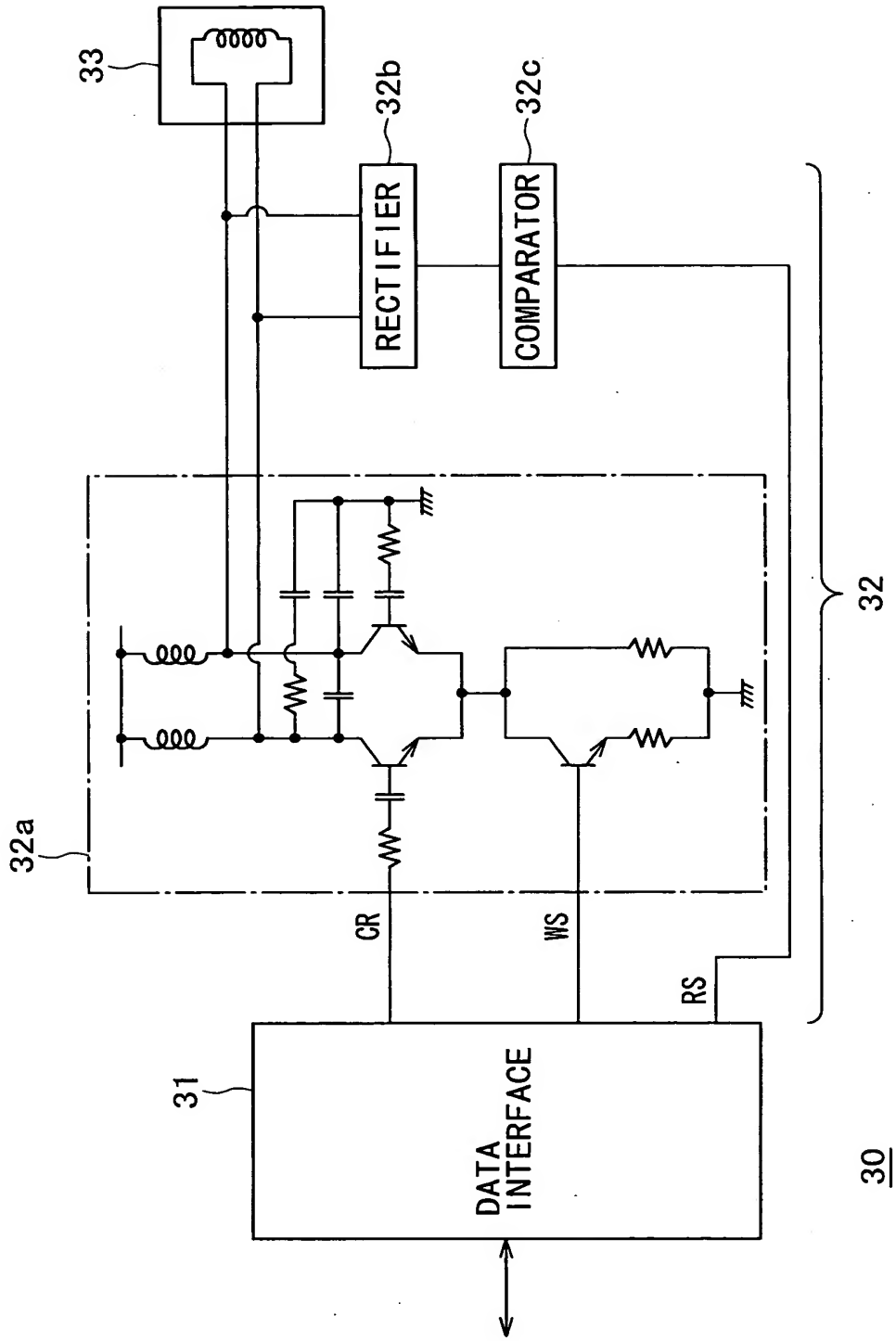

33
32b
32c
RECTIFIER
COMPARATOR
32
32a
CR
WS
RS
31
DATA INTERFACE
30

FIG. 3A

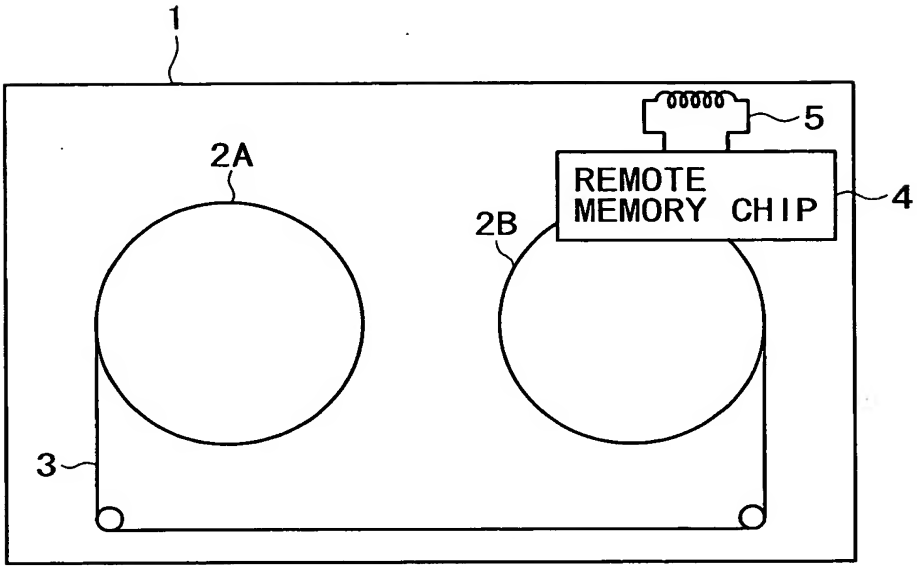

1
5
2A
REMOTE
MEMORY CHIP
4
2B
3

FIG. 3B

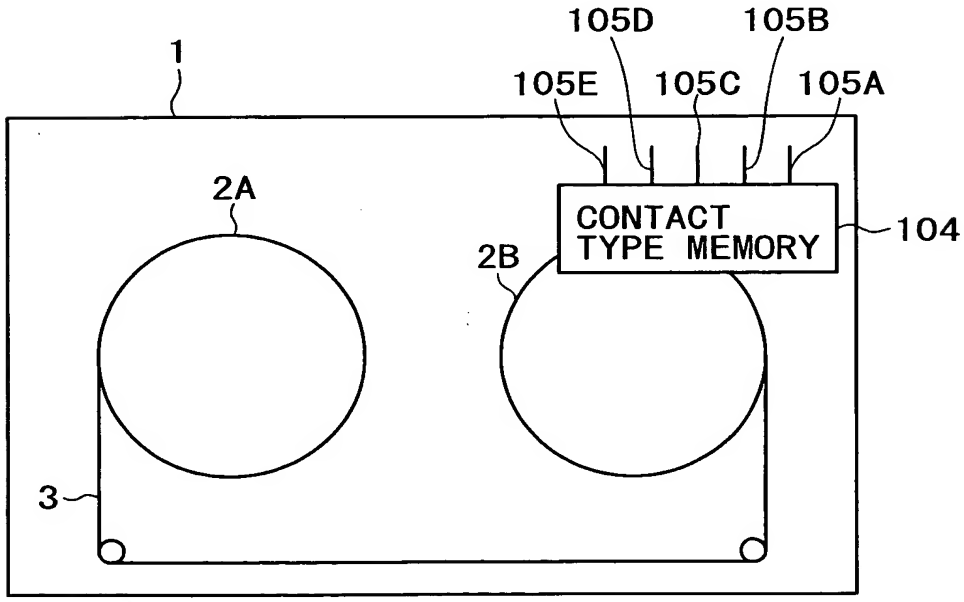

105D
105B
1
105E
105C
105A
2A
CONTACT
TYPE MEMORY
104
2B
3

FIG. 4

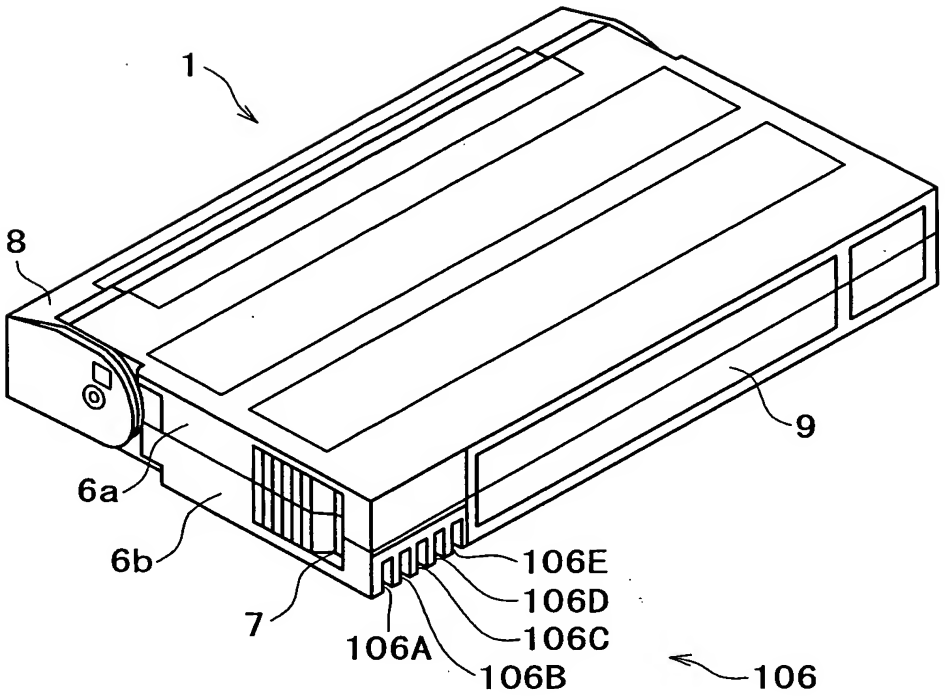
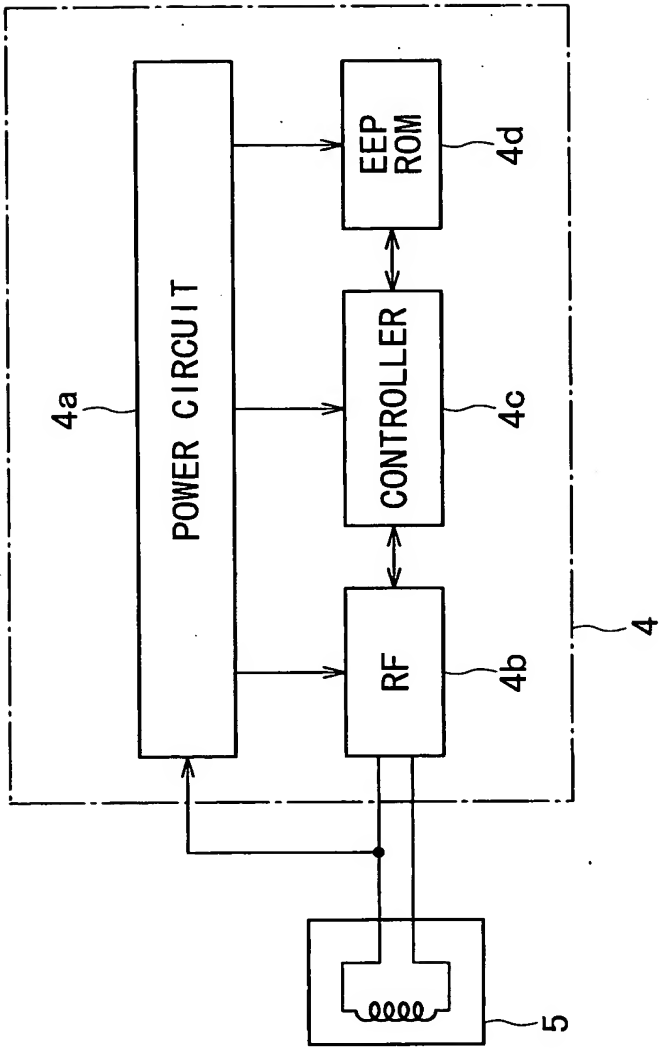


FIG. 5



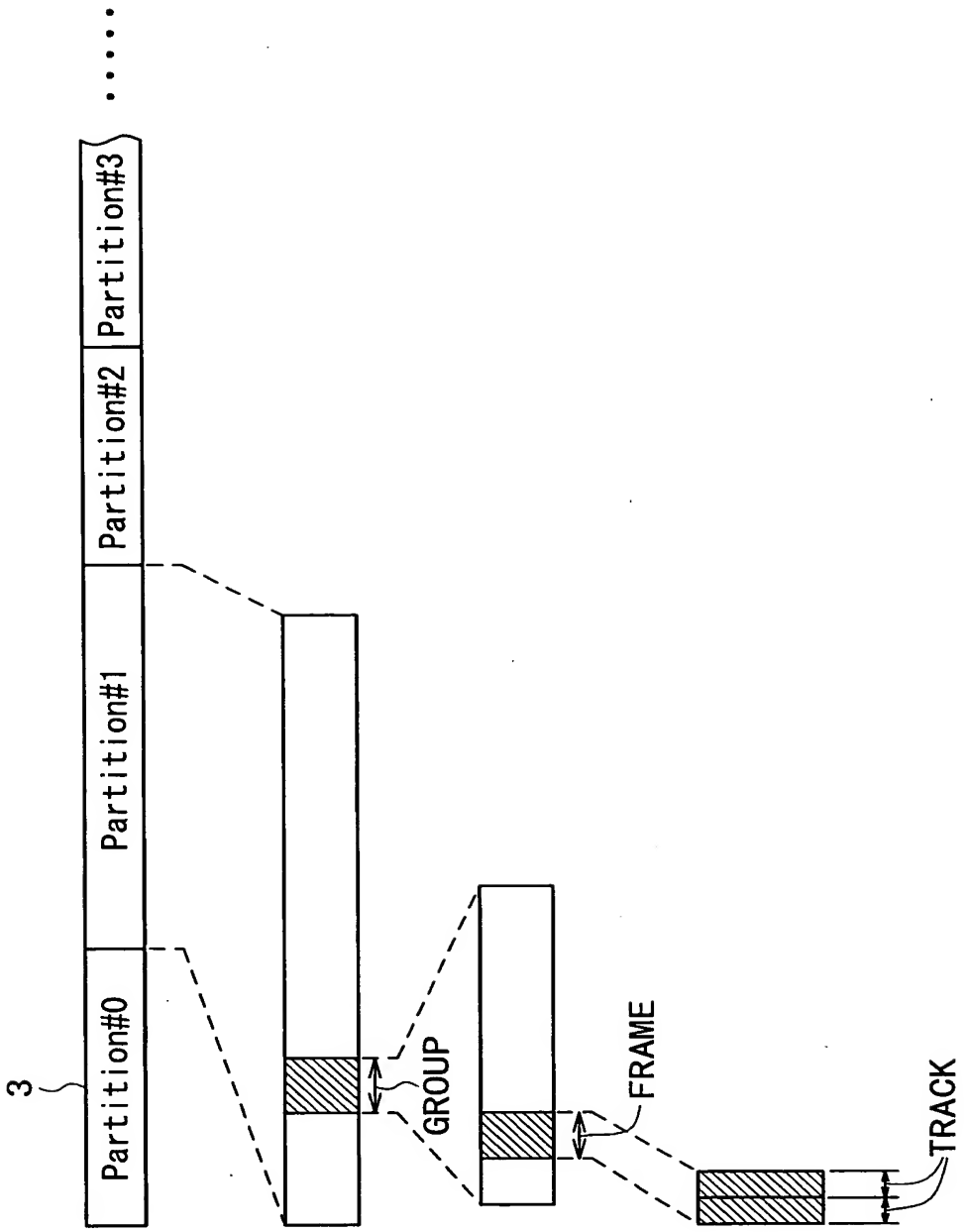


FIG. 6A

FIG. 6B

FIG. 6C

FIG. 6D

FIG. 7A

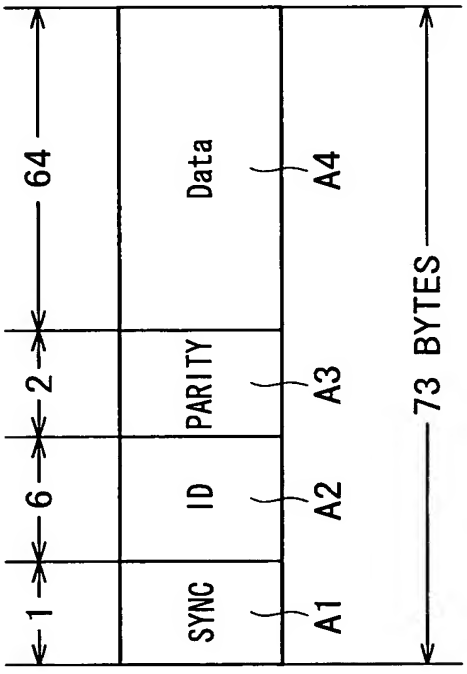


FIG. 7C

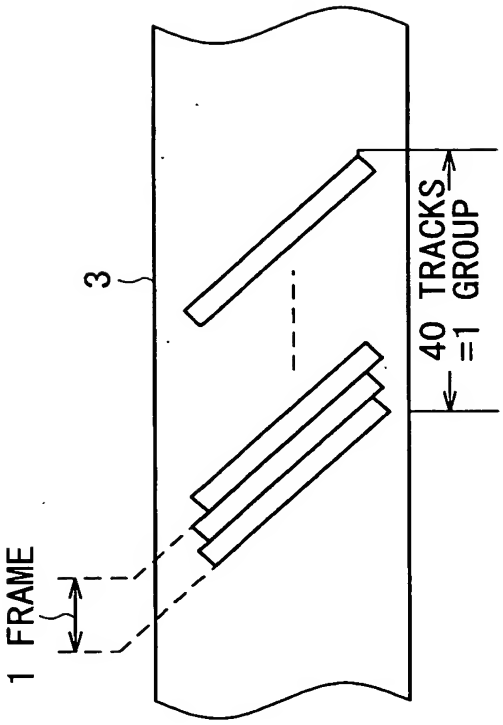
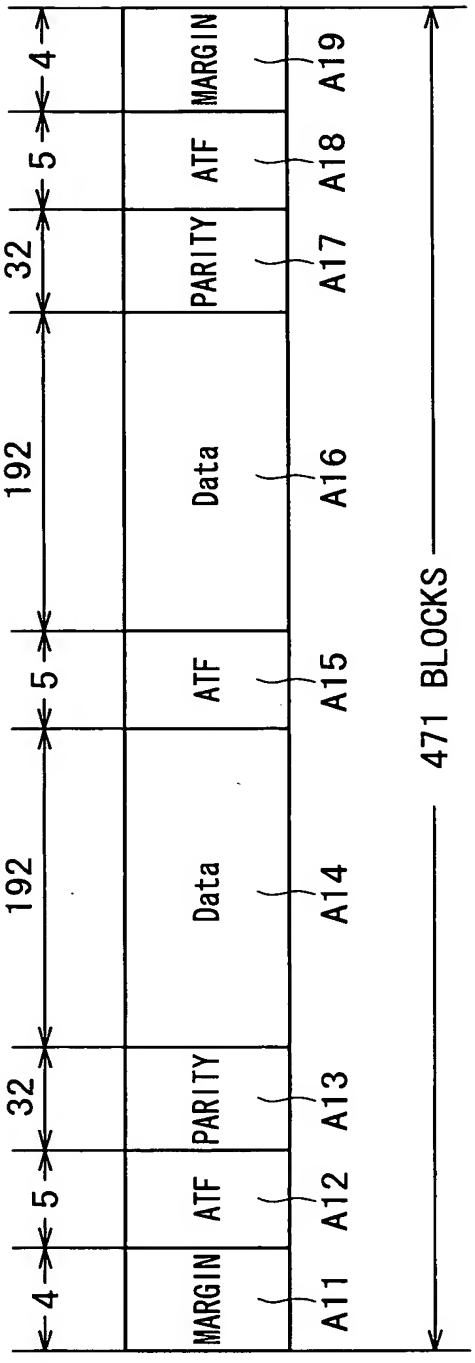


FIG. 7B



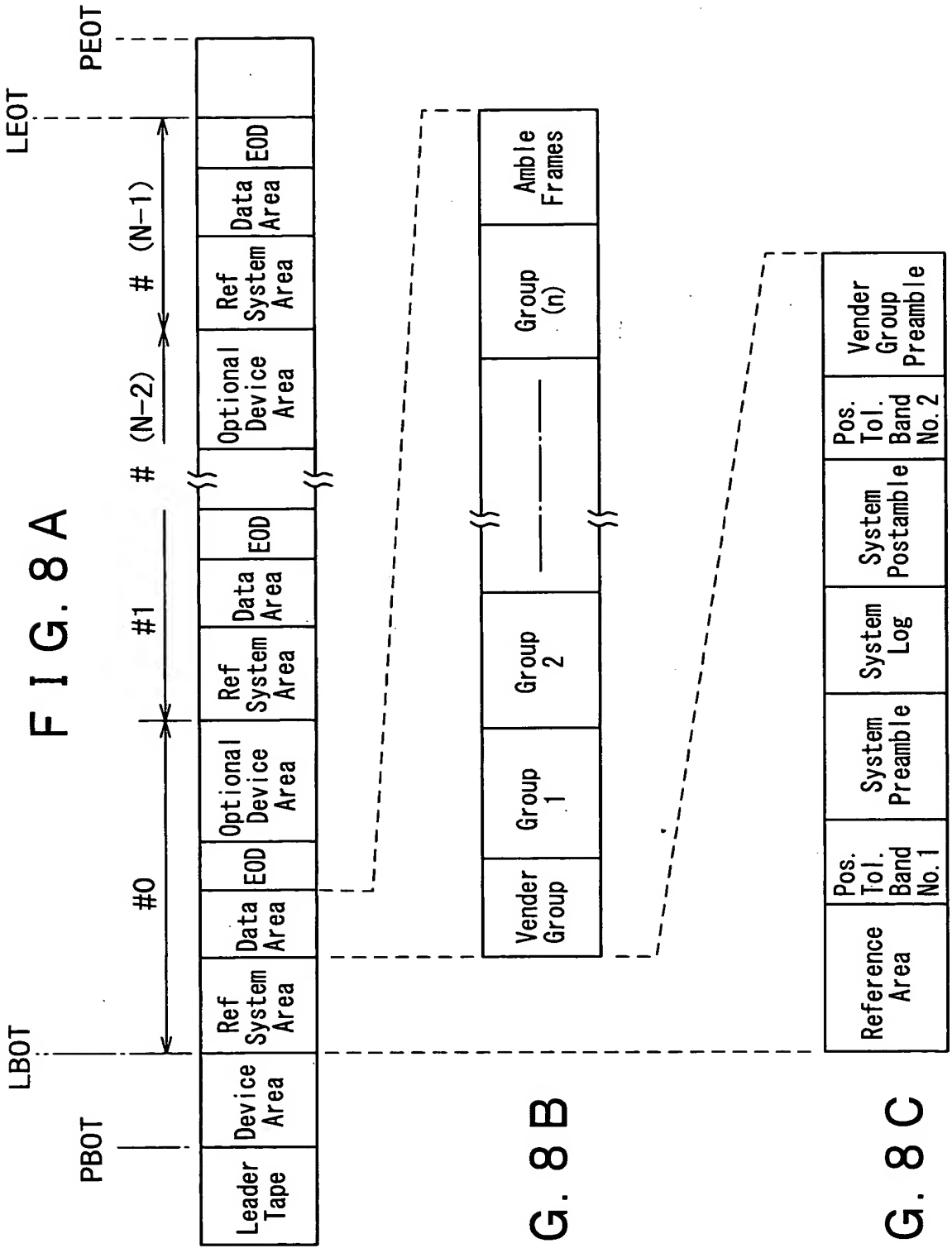


FIG. 8A

FIG. 8B

FIG. 8C

FIG. 9

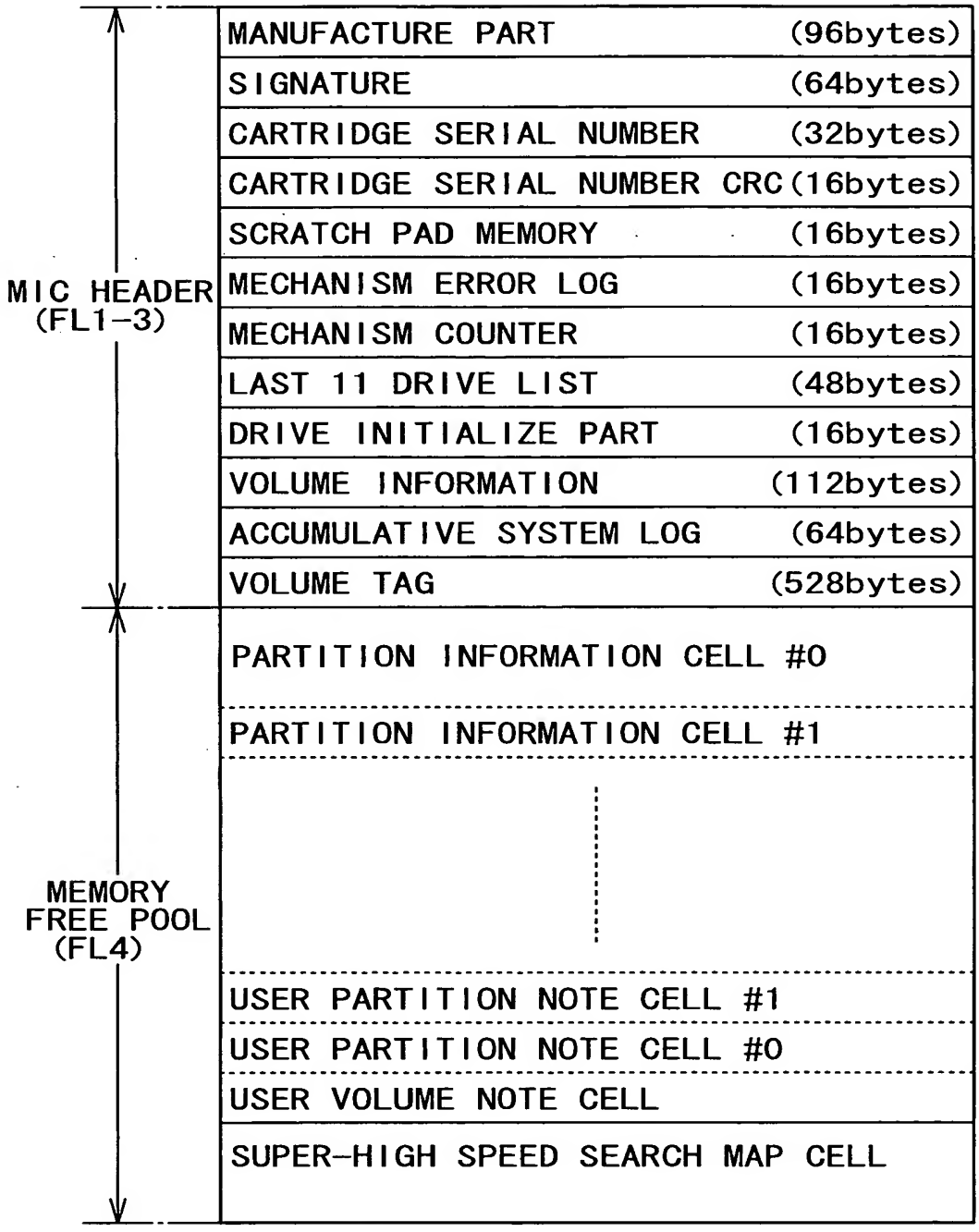

MIC HEADER (FL1-3)
MEMORY FREE POOL (FL4)
MANUFACTURE PART (96bytes)
SIGNATURE (64bytes)
CARTRIDGE SERIAL NUMBER (32bytes)
CARTRIDGE SERIAL NUMBER CRC (16bytes)
SCRATCH PAD MEMORY (16bytes)
MECHANISM ERROR LOG (16bytes)
MECHANISM COUNTER (16bytes)
LAST 11 DRIVE LIST (48bytes)
DRIVE INITIALIZE PART (16bytes)
VOLUME INFORMATION (112bytes)
ACCUMULATIVE SYSTEM LOG (64bytes)
VOLUME TAG (528bytes)
PARTITION INFORMATION CELL #0
PARTITION INFORMATION CELL #1
USER PARTITION NOTE CELL #1
USER PARTITION NOTE CELL #0
USER VOLUME NOTE CELL
SUPER-HIGH SPEED SEARCH MAP CELL

FIG. 10

Manufacture Part	manufacture part checksum	1byte
	mic type	1byte
	mic manufacture date	4bytes
	mic manufacture line name	8bytes
	mic manufacture plant name	8bytes
	mic manufacturer name	8bytes
	mic name	8bytes
	cassette manufactured date	4bytes
	cassette manufacturer line name	8bytes
	cassette manufacturer plant name	8bytes
	cassette manufacturer name	8bytes
	cassette name	8bytes
	oem customer name	8bytes
	physical tape characteristic ID	2bytes
	maximum clock frequency	2bytes
	block size	1byte
	mic capacity	1byte
	write protect top address	2bytes
	write protect count	2bytes
	reserved	1byte
	application ID	1byte
	offset	2bytes

FIG. 11

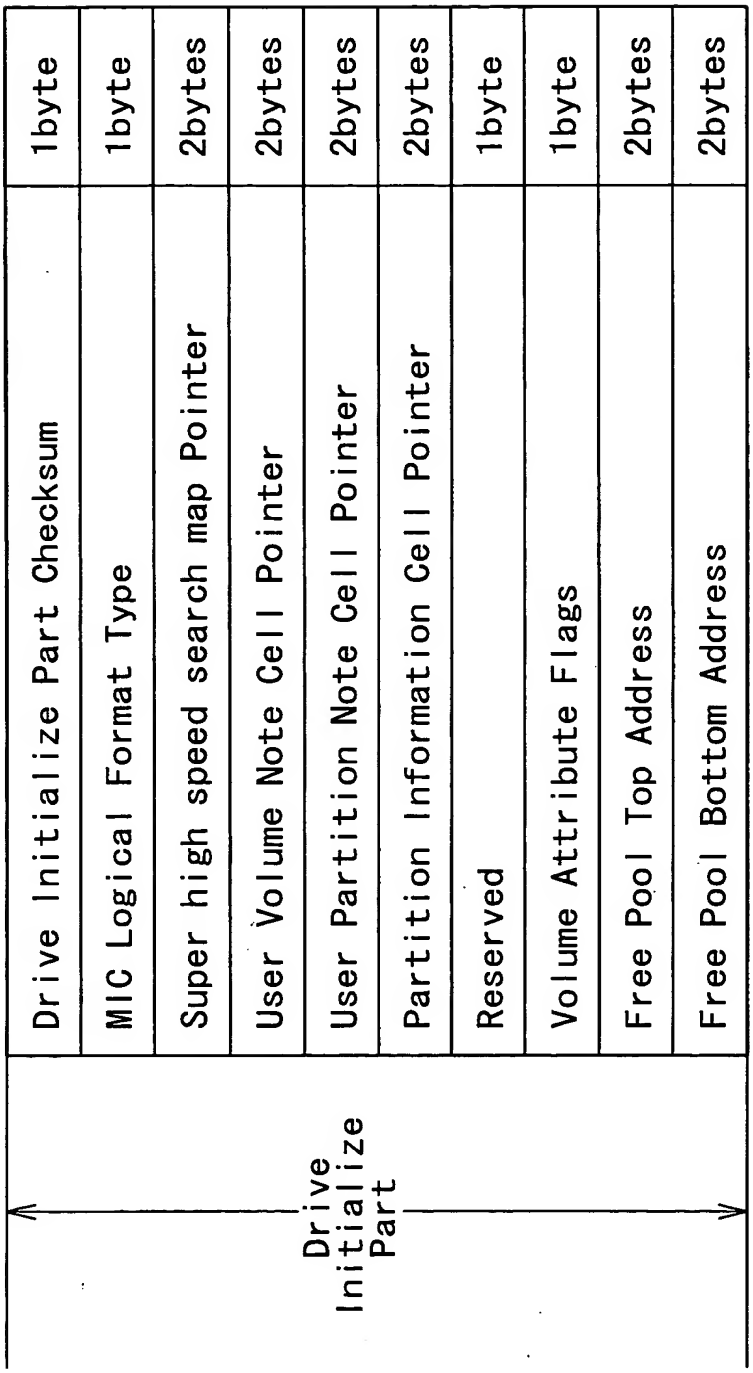

Drive Initialize Part
Drive Initialize Part Checksum
1byte
MIC Logical Format Type
1byte
Super high speed search map Pointer
2bytes
User Volume Note Cell Pointer
2bytes
User Partition Note Cell Pointer
2bytes
Partition Information Cell Pointer
2bytes
Reserved
1byte
Volume Attribute Flags
1byte
Free Pool Top Address
2bytes
Free Pool Bottom Address
2bytes

FIG. 12

Value	Definition
0	AIT-1 Virgin MIC
1	AIT-1 Basic MIC Logical Format Type 1
2 to 9	Reserved
10	AIT-2 Virgin MIC
11	AIT-2 Basic MIC Logical Format Type 1
12 to 13	Reserved
14	AIT-2 Virgin Remote MIC
15	AIT-2 Basic Remote MIC Logical Format Type 1
16 to 19	Reserved
20	AIT-3 Virgin Remote MIC
21	AIT-3 Basic Remote MIC Logical Format Type 1
22 to 255	Reserved

FIG. 13

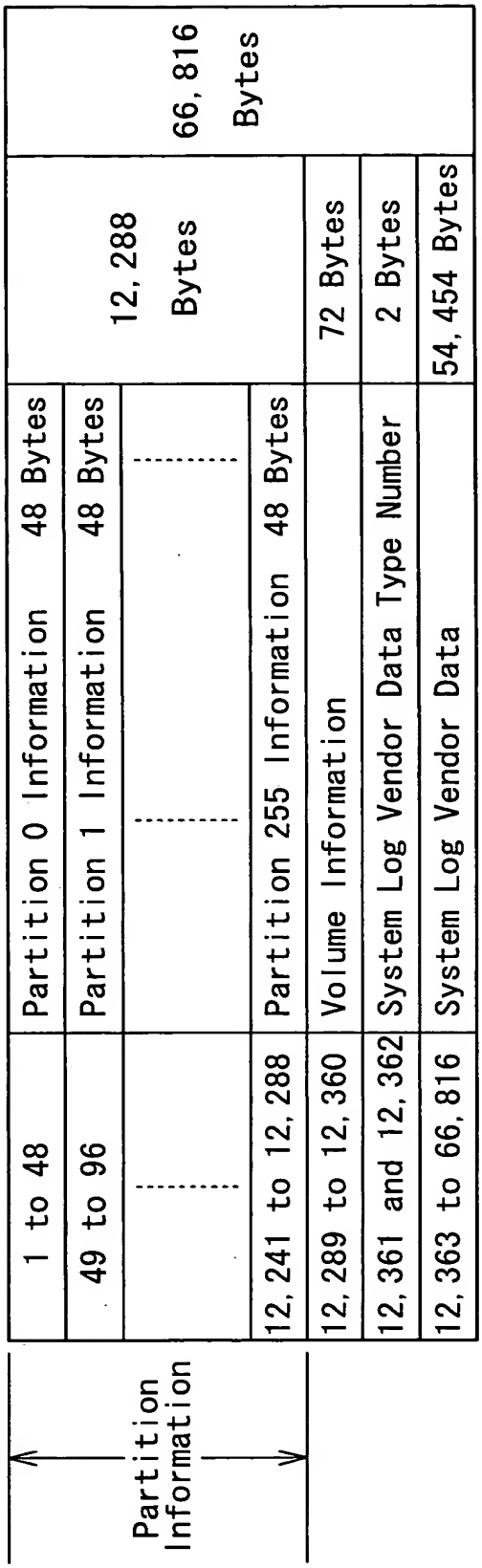
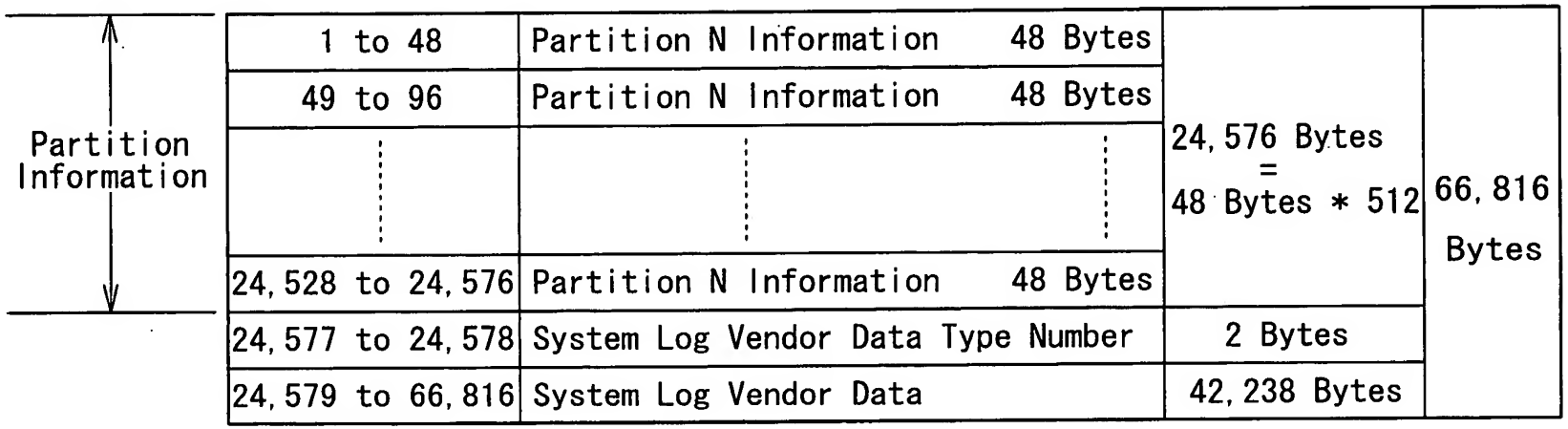
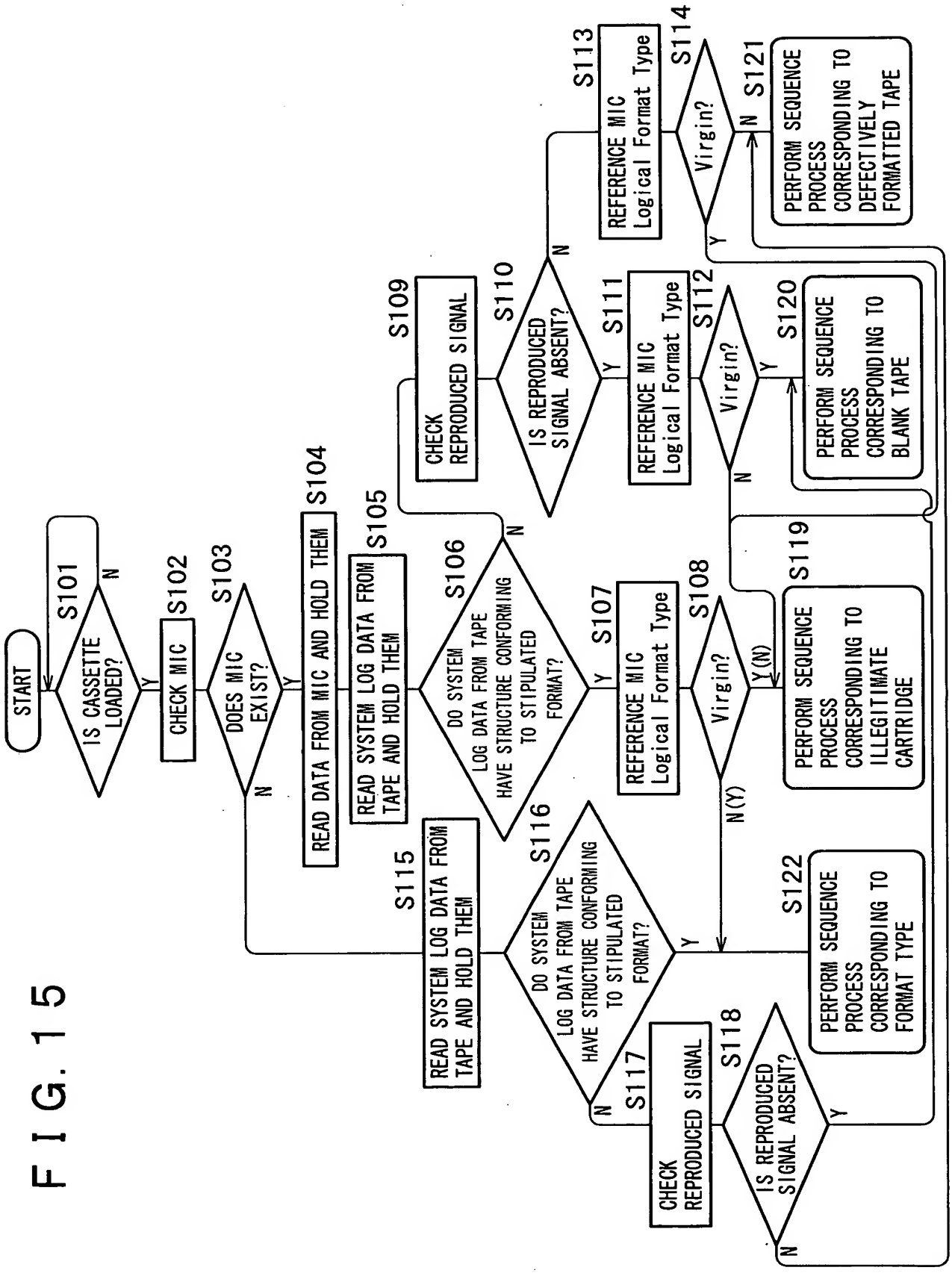

Partition Information
1 to 48
Partition 0 Information 48 Bytes
49 to 96
Partition 1 Information 48 Bytes
12,241 to 12,288
Partition 255 Information 48 Bytes
12,289 to 12,360
Volume Information
12,361 and 12,362
System Log Vendor Data Type Number
12,363 to 66,816
System Log Vendor Data
12,288 Bytes
72 Bytes
2 Bytes
54,454 Bytes
66,816 Bytes

FIG. 14



System Log with Vendor Data information(Type 1)

FIG. 15


START
S101
IS CASSETTE LOADED?
N
Y
S102
CHECK MIC
S103
DOES MIC EXIST?
Y
N
S104
READ DATA FROM MIC AND HOLD THEM
S105
READ SYSTEM LOG DATA FROM TAPE AND HOLD THEM
S106
DO SYSTEM LOG DATA FROM TAPE HAVE STRUCTURE CONFORMING TO STIPULATED FORMAT?
N
Y
S107
REFERENCE MIC Logical Format Type
S108
Virgin?
Y(N)
N(Y)
S109
CHECK REPRODUCED SIGNAL
S110
IS REPRODUCED SIGNAL ABSENT?
N
Y
S111
REFERENCE MIC Logical Format Type
S112
Virgin?
Y
N
S113
REFERENCE MIC Logical Format Type
S114
Virgin?
Y
N
S115
READ SYSTEM LOG DATA FROM TAPE AND HOLD THEM
S116
DO SYSTEM LOG DATA FROM TAPE HAVE STRUCTURE CONFORMING TO STIPULATED FORMAT?
N
Y
S117
CHECK REPRODUCED SIGNAL
S118
IS REPRODUCED SIGNAL ABSENT?
N
Y
S119
PERFORM SEQUENCE PROCESS CORRESPONDING TO ILLEGITIMATE CARTRIDGE
S120
PERFORM SEQUENCE PROCESS CORRESPONDING TO BLANK TAPE
S121
PERFORM SEQUENCE PROCESS CORRESPONDING TO DEFECTIVELY FORMATTED TAPE
S122
PERFORM SEQUENCE PROCESS CORRESPONDING TO FORMAT TYPE